



**Monthly Drought Update**  
**December 2, 2014**  
**San Luis Obispo County**

Note: Information provided in this update varies by date.

**CURRENT CONDITIONS**

**U.S. Drought Monitor Status:**

The latest U.S. Drought Monitor report released November 20, 2014, indicates San Luis Obispo County remains at the **D4 – Exceptional Drought intensity rating**. Approximately 94% of the state remains at a level D-2 Severe Drought or worse with more than 55% of the state in a D4 – Exceptional Drought intensity rating.

**San Luis Obispo County Precipitation Totals (in inches):**

Sub-Region	Area / Rain Station	Average Annual Rainfall	2014-15 Water Year (July 2014-June 2015)	
			Cumulative Total	% of Total Average
North Coast	Cambria (ALERT #717)	22.0	1.38	6%
	Whale Rock Reservoir (County Site #166.1)	16.0	0 *	0% *
Inland	Paso Robles (County Site #10.0)	14.1	1.02	7%
	NE Atascadero (ALERT #711)	17.0	0.98	6%
	Atascadero MWC (County Site #34.0)	17.5	1.12	6%
	Santa Margarita (ALERT #723)	24.0	1.73	7%
	Salinas Dam (County Site #94)	20.9	1.33	6%
	SLO Reservoir (ALERT #749)	24.0	1.22	5%
South Coast	Lopez Recreation Area (ALERT #707)	23.0	1.55	7%
	West of Nipomo (CIMIS #202)	14.8	0 *	0% *
	Nipomo East (ALERT #728)	18.0	1.73	10%

Notes: This table contains provisional data from automated gauges and has not been verified. All units reported in inches.

\* Rainfall data unavailable at time of report preparation.

**Near-term Outlook for Precipitation:**

The county received the first good Pacific storm of the season on October 31 with most areas in the county receiving between 1 and 2 inches of precipitation. Good remnant soil moisture is producing sprouting of grasses and forbs which will continue to grow with additional rainfall. The current Area Forecast Discussion indicates a good chance of rain in the coming week. The National Oceanic and Atmospheric Administration's (NOAA) Climate Prediction Center has reduced their El Niño Watch to a 58% chance of a weak strength event over the next few months. The Winter Precipitation Outlook favors a greater than 33% chance of above average rainfall for Southern California, while the U.S. Seasonal Drought Outlook calls for the drought to persist or intensify.

**Reservoir Levels (% of capacity):**

Note: Historical averages calculated using data from the following time frame:

Nacimiento: 1959 – 2013; Lopez: 1994-2013; Salinas: 1987-2013; and Whale Rock: 1985-2013.

Reservoir	% of Capacity	Current Acre Feet Storage
Nacimiento	16%	60,665
Lopez	43%	21,028
Salinas	21%	4,992
Whale Rock	46%	17,957

Source: [www.slocountywater.org](http://www.slocountywater.org) County of San Luis Obispo

## STATE WATER

**Status:** The Department of Water Resources (DWR) continues to deliver State Water “Carryover” water for 2014 and DWR has increased its allocation for South of Delta Service Contractors from 0% to 5%. The Flood Control District is maximizing State Water deliveries to Zone 3 agencies. We are still awaiting 2015 delivery amounts but are assuming 0%. San Luis Reservoir is currently at 21% capacity.

**Actions:** The Public Works Department has released a 2015 projected delivery schedule and met with sub-contractors to discuss 2015 projected deliveries with a zero delivery scenario.

## VULNERABLE WATER SYSTEMS

As discussed in the State & Federal Key Action Items section below, the Department of Water Resources announced a 52% funding level for the County’s Integrated Regional Water Management (IRWM) Grant package of five projects totaling \$12.2 million. Staff is currently reviewing options and working on next steps.

**County Service Areas (CSA’s):****Santa Margarita (CSA 23)**

- Drought response level remains at ALERT status.
- Primary pumping is from shallow well No. 4. Deep well No. 3 is available for use if needed to supplement well No. 4.
- An emergency water supply project connecting Santa Margarita to Atascadero Mutual Water Company is being pursued through the Integrated Regional Water Management (IRWM) drought expedited implementation grant process. This project was approved in the suite of projects by the Board on June 17, 2014.
- An emergency ordinance was adopted limiting outdoor watering. An informational mailer was sent to customers and signs in the community have been installed.
- Staff is monitoring conditions for a potential status change to CRITICAL.

**Shandon (CSA 16)**

- Two wells currently provide all water to the Shandon community and continued to be monitored.
- An emergency ordinance was adopted limiting outdoor watering. An informational mailer was sent to customers and signs in the community have been installed.

**Cayucos (CSA 10A)**

- Supply is available from Whale Rock and one on - site well. Staff has given a presentation to the Advisory Committee and business groups regarding conserving this supply.
- An emergency ordinance was adopted limiting outdoor watering. An informational mailer was sent to customers and signs in the community have been installed.

**Avila Valley (CSA 12)**

- Adequate supply is available from Lopez and State water “carryover” water sources for this year.

**Chorro Valley Institutions (CMC, Animal Services, Sheriff, County Operations, Camp San Luis, Cuesta College, County Office of Education):**

- 2014 State water carryover water is available and being provided.
- An interconnection between the existing Nacimiento Water Project pipeline and the existing Salinas pipeline is being pursued through the State’s drought emergency funds. The board approved this project on June 17, 2014 to be included in the IRWM drought grant application.
- The existing distribution system is being evaluated to assure water losses are minimized.

## Attachment 1

- CMC is at 90% design of their water treatment plant upgrades in preparation for a potential state water shutdown.

### Non-County Operated:

- **City of Morro Bay**  
Status: Emergency inter-tie with Chorro Valley and desalination permit.
- **Cambria Community Services District**  
Status: Emergency San Simeon Creek Brackish Water Supply Project – The Central Coast Regional Water Quality Control Board approved necessary permits and testing has begun.
- **San Simeon Community Services District**  
Status: Proposed recycled water project part of June 17, 2014 IRWM drought application. Working on revised work scope.
- **Heritage Ranch Community Services District**  
Status: The Nacimiento River is the only available water source for the community of Heritage Ranch. The emergency inter-tie agreement between the Flood Control District and the CSD was part of June 17, 2014 IRWM drought application.
- **Rural Paso Robles residents**  
Status: Continuing to identify water-trucking options and examine outreach efforts. See County Drought Conditions and Water Conservation Website for drought relief update information.

## IMPACTS

### Agricultural Impacts:

The University of California Cooperative Extension has discontinued sending out monthly drought surveys to key stakeholders for the remainder of this year, since conditions have not substantially changed in the past 60 days. Warm soil temperatures and recent precipitation have resulted in germination of forage plants and weeds throughout the county. Continued rainfall will be critical to produce sufficient forage for cattle, and sufficient vegetation to prevent soil erosion, should high intensity rainfall events occur later in the fall and winter months.

Weeds that might normally be suppressed through competition from grasses and other beneficial plants, including Russian thistle, yellow starthistle, and medusahead, may be of increased concern this year. Russian thistle, for example, is very competitive when moisture is a limiting factor to the growth of other vegetation, when soils are disturbed, or when competing vegetation is suppressed by overgrazing or poor crop establishment. More information on control of these weeds can be found at the UC Weed Research and Information Center at [http://wric.ucdavis.edu/information/info\\_spec\\_weed.htm](http://wric.ucdavis.edu/information/info_spec_weed.htm).

Throughout the growing season, key stakeholders have provided information regarding increasing impacts from salinity in the root zone. The accumulation of salts in irrigated soils under drought conditions creates increasing problems over time if not managed. Without adequate leaching rainfall, additional irrigation leaching fractions will need to be supplied in order to flush salts from the root zone. Growers may opt to leverage rainfall in helping to both prevent accumulated salts from moving back into the root zones of their crops and to leach salts below the root zone. Both the Agricultural Commissioner's Office and UC Cooperative Extension receive phone calls from the public questioning irrigations that occur during periods of rainfall. Staff help to explain that this is a strategy used to manage soil salinity.

Strategies for agricultural producers in addressing the drought may be found in "The 2014 Drought – Impacts on San Luis Obispo County Agriculture", posted online at <http://cesanluisobispo.ucanr.edu/files/201665.pdf>.

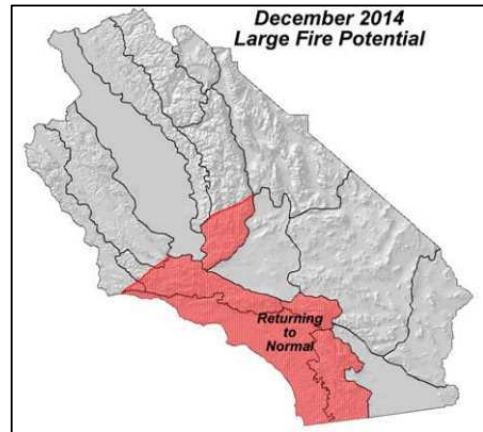
There have been no changes to agricultural assistance programs in the past 30 days, according to USDA Farm Services Agency staff.

## **Fire Danger:**

### Fire Danger

To date, CAL FIRE has responded to **5,468 fires** across the state since January 1, burning **91,027 acres** in state responsibility areas. This year's fire activity is well above the year-to-date average of 4,389 wildfires and 86,671 acres burned. These statistics do not include fires on Federal jurisdiction. Current fire information indicates there are currently no uncontained state fires.

In San Luis Obispo County, from January through October, CAL FIRE has responded to **129 wildfires** which burned **119 acres**. Since 2007, averages for this same period of time are 157 wildfires burning 1,025 acres.



### Equipment/Staffing:

Due to recent rains and moderating conditions, CAL FIRE will transition on November 24 down to 10 wildland engines with a staffing level of 3.0 employees. With green grass sprouting throughout the area and with cool weather and the increased chances for rain, the burn permit suspension may be lifted as soon as November 24.

### Live Fuel Moisture (LFM)

*(LFM is the moisture content of live vegetation expressed as a percentage of the oven-dry weight.)*

LFM values remain at or near historical lows and below critical levels (60%). Despite measurable precipitation, LFM values are expected to follow seasonal trends and remain level or increase only slightly as plants respond to cooler weather and shorter days. Fall/winter dormancy prevents most species from responding quickly to precipitation and LFM values are not expected to increase substantially until next spring's growing cycle.

### Dead Fuel Moisture

*(The moisture content of dead organic fuels is another important component of the relative fire danger. As with LFM above, dead fuel moisture levels are a good indicator of how likely fuels are to ignite and how intensely they will burn. 100-hr fuel refers to vegetation between 1 and 3 inches in diameter and 1000-hr fuel is 3-6 inches. When the fuel moisture content is low, fires start easily and will spread rapidly.)*

Currently, due to recent precipitation and cool, humid weather, dead fuels are just below average following a spike after the October 31 storm.

### Temperatures/Relative Humidity (RH)

*(When combined with other factors influencing the fire environment such as wind, steep topography, and low fuel moisture levels, hot temperatures and low RH can significantly increase the fire danger by increasing fire initiation, spread rates, burning intensity, and difficulty of control.)*

Fall weather and shorter days have continued to moderate the fire danger overall due to an increase in cool, humid conditions.

### Energy Release Component (ERC)

*(ERC is an index related to how hot a fire could burn. It is directly related to the 24-hour, potential worst case, total available energy (BTUs) at the head of a fire. The ERC can serve as a good characterization of fire season as it tracks seasonal fire danger trends well. ERC has low variability, and is the best fire danger component for indicating the effects of intermediate to long-term drying on fire behavior.)*

The recent rains and fall weather has increased the dead fuel moistures and decreased ERC values to near average levels which has reduced relative fire danger.

## **Economic:**

Drought-related job losses are continuing to increase across the state. Historically, drought-induced economic losses are felt by municipalities, business and industry, agricultural enterprises, households

and individuals, and governments. In an effort to coordinate local and state response to drought impacts the following surveys are being utilized by the County:

Drought Business Impact Survey

The San Luis Obispo County Workforce Investment Board (WIB) is gathering information on local drought-related job impacts. This is part of a statewide survey by the California Labor and Workforce Development Agency (LWDA) as part of an ongoing online survey to inform the Governor's Drought Relief Task Force of the drought's ripple effects. The WIB's Drought Business Impact survey is available at <http://sloworkforce.com/drought-survey/>. Local Workforce Investment Boards, workforce partners, and other local workforce entities are encouraged to complete the survey regularly to keep the Governor's Drought Relief Task Force up to date on the local area. The WIB is conducting outreach to chambers of commerce and other business services agencies for assistance in outreach to businesses and employers regarding the drought survey. Though the WIB is hearing that there are impacts, the county does not have any "reportable" impacts due to the State's requirements for reporting (i.e. specific business name, address, etc.).

Domestic Water Issues-Intake Form

The number of dry groundwater wells, small streams, springs, and creeks are increasing as the drought continues. An effective response to this growing public health threat requires two key elements: (1) data collection to better understand the extent of the problem and (2) clear communication to all responding agencies and the public about available resources. As a result, the Governor's Drought Task Force created an online intake form for local, state, or tribal and federal agencies to document domestic water issues. The information is intended to inform and coordinate state response and mitigate drought impacts. Data collected is considered confidential and access is restricted. Individuals with domestic water issues are encouraged to contact County Environmental Health at (805) 781-5544.

Anonymous Supplemental Domestic Water Issues Online Survey

The County Drought Task Force created a supplemental anonymous survey. The survey does not ask for any identifying information and is intended to support our request for federal disaster assistance for individuals. Individuals who wish to remain anonymous are encouraged to complete the supplemental survey online [www.slocounty.ca.gov/admin/Drought\\_Update](http://www.slocounty.ca.gov/admin/Drought_Update) or by phone by calling (805) 781-5011.

To date, the County has received 73 responses to the supplemental survey. Of the 73 respondents, 33% report that one or more wells have gone dry and 10% report they are trucking in water.

**STATE & FEDERAL KEY ACTION ITEMS FROM LAST MONTH**

**Proposition 84- IRWM 2014 Drought Grant Final Awards Announced**

Proposition 84 Chapter 2 Integrated Regional Water Management (IRWM) Grant Program, administered by DWR, provides funding for projects that assist local public agencies meet long term water needs of the state including the delivery of safe drinking water and the protection of water quality and the environment. On October 30, 2014, the Department of Water Resources conditionally awarded approximately \$221 million to 27 proposals to fund projects costing in excess of \$780 million. The San Luis Obispo County Flood Control and Water Conservation District submitted a package of five projects totaling \$12.2 million. The announced grant results provided only \$6.3 million in funding for the projects.

**Central Coast Regional Water Quality Control Board Approved Cambria Emergency Project:**

On November 14, the Central Coast Regional Water Quality Control Board approved permits that will allow the Cambria Community Services District to operate an emergency water treatment system designed to increase the community's water supplies during the drought. The system will pull groundwater from an existing well near the District's wastewater disposal ponds, treat the water to drinking water standards using advanced methods to remove impurities, then inject the water back in the San Simeon Creek aquifer where it will be available to the District's existing water supply wells.

**COUNTY DROUGHT TASK FORCE KEY ACTION ITEMS FROM LAST MONTH**

**County Office of Emergency Services:**

San Luis Obispo County OES continues to coordinate with Cal OES to provide updates on the drought situation, respond to specific information requests to Cal OES, and coordinate local emergency needs. In

addition, County OES continues to gather local situation status information and drought costs throughout the county in order to send the information to Cal OES.

**Emergency Actions:**

No new emergency actions have been taken specific to the drought in this reporting period.

**County Facilities Usage & Conservation Actions:**

The County has taken the following actions:

- Fixture Replacement: To date, a total of 38 buildings have been retrofitted with low-flow fixtures, saving an estimated 3,500 gallons per week.
- Water Audit: A water audit site visit was conducted in July with a focus on water efficiency opportunities at County facilities, parks, and golf. The site visit estimated a rough savings of 15 acre-feet by replacing fixtures and performing retrofits at County Operations Center facilities. Findings from the water audit will be developed into future plans for projects.
- Energy and Water Manager Professional Services Contract: Proposals for an Energy and Water Manager professional services contract were received, negotiations are in progress, and a contract is pending award.
- County Parks: Irrigation reductions of a minimum of 20% have been accomplished by reducing irrigation controller times. The Central Controlled Irrigation System controllers and flow meter have been installed and are operational at Nipomo Park. With the rainfall received and cooler temperatures staff has reduced watering on landscape and sports fields to a minimum.

**Drought Contingency Planning:**

The Public Health Department, the Public Works Department, and CAL FIRE/County Fire continue to develop plans to ensure there is adequate supply of water for firefighting and domestic water use in the event that a community does not have enough water. Water availability information from small public water systems has been categorized into three categories; Watch, Vulnerable, and Critical. The information has been placed into a GIS mapping layer for contingency planning.

**County Public Outreach Actions:**

The Public Works Department continues to work with agencies affected by the drought and provide educational presentations to interested parties. Conservation mailers have been sent to retail customers along with conservation signs in County Service Areas.

Information regarding current and upcoming drought relief programs for rural homeowners has been placed on the County Drought Conditions and Water Conservation webpage. Rural Development, an agency of the United States Department of Agriculture (USDA), delivers a number of programs to help improve the quality of life in rural communities throughout the nation. These programs may also help rural communities, businesses and individuals impacted by California's ongoing drought conditions. For additional resources and information on applying for any of these programs, please visit <http://www.rurdev.usda.gov/ca> or the County Drought Conditions and Water Conservation webpage at [http://www.slocounty.ca.gov/admin/Drought\\_Update.htm](http://www.slocounty.ca.gov/admin/Drought_Update.htm).

In an effort to raise awareness about water supply issues and communicate the call for a 20% voluntary reduction in water usage, the County continues to examine multiple channels of communication for water conservation outreach efforts.



## **DROUGHT RELATED WEBSITES FOR MORE INFORMATION**

**County of San Luis Obispo Drought Conditions and Water Conservation**

([http://www.slocounty.ca.gov/admin/Drought\\_Update.htm](http://www.slocounty.ca.gov/admin/Drought_Update.htm))

**State's Water Conservation Campaign; Save our Water**

([www.saveourh2o.org](http://www.saveourh2o.org))

**California's Drought Information Clearinghouse; Drought.CA.Gov**

(<http://ca.gov/drought/>)

**California Department of Food and Agriculture; Drought information**

([www.cdfa.ca.gov/drought/](http://www.cdfa.ca.gov/drought/))

**California Department of Water Resources; Current Water Conditions**

([www.water.ca.gov/waterconditions/drought/](http://www.water.ca.gov/waterconditions/drought/))

**California State Water Resources Control Board; Water Rights, Drought Info and Actions**

([www.swrcb.ca.gov/waterrights/water\\_issues/programs/drought/index.shtml](http://www.swrcb.ca.gov/waterrights/water_issues/programs/drought/index.shtml))

**California Department of Public Health; Drinking Water CDPH Drinking Water Program**

([www.cdph.ca.gov/programs/pages/dwp.aspx](http://www.cdph.ca.gov/programs/pages/dwp.aspx))

**USDA Disaster and Drought Assistance Information; USDA Programs**

([http://www.usda.gov/wps/portal/usda/usdahome?navid=DISASTER\\_ASSISTANCE](http://www.usda.gov/wps/portal/usda/usdahome?navid=DISASTER_ASSISTANCE))

**UC Cooperative Extension Drought Information Resources; Drought Information Resources**

([http://cesanluisobispo.ucanr.edu/Drought\\_Information/](http://cesanluisobispo.ucanr.edu/Drought_Information/))

